EOSDIS Core System Project

Science Data Processing Segment (SDPS) Acceptance Data Package for the ECS Project (Release 6A)

January 2002

Raytheon Company Upper Marlboro, Maryland

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Preface

This document is a formal contract deliverable with an approval code 1. It requires Government review and approval prior to acceptance and use. This document is under ECS contractor configuration control. Once this document is approved, Contractor approved changes are handled in accordance with Class I and Class II change control requirements described in the Earth Observing System (EOS) Configuration Management Plan, and changes to this document shall be made by document change notice (DCN) or by complete revision.

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Abstract

This report identifies the products and associated documentation included with Release 6A of the Science Data Processing Segment (SDPS), delivered May 16, 2001.

This report includes references to Release 6A data:

- a. Acceptance Test Report.
- b. Results and Action Items from the SDPS Release 6A SRA.
- c. Version Description Document.
- d. Design data.
- e. SDPS Non-Conformance Reports (NCRs), which are included in the Distributed Defect Tracking System (DDTS).
- f. Operations Tools Manual, updated for Release 6A.
- g. Mission Operations Procedures, updated for Release 6A.
- h. ECS Project Training Material, updated for Release 6A.

Keywords: Configuration Audit Report, PCA, FCA, VDD, SRA, Acceptance Test Report, action items, operating manuals, deviation, and training material.

Change Information Page

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Abbreviations and Acronyms

1. Introduction

1.1 Identification

This document is the Science Data Processing Segment (SDPS) Release 6A Acceptance Data Package for the ECS Project, which is Item 108 on the Contract Data Requirements List (CDRL) and defined by Data Item Description (DID) 535/PA1 under contract NAS5-60000.

1.2 Scope

This document identifies the SDPS Acceptance Data Package for Release 6A of the ECS Project.

1.3 Purpose

This document includes by reference the information that makes up the ECS SDPS Release 6A Acceptance Data Package. Its purpose is to provide high level information regarding the content and status of the SDPS at the time of the Site Readiness Assessment (SRA) for Release 6A. This information includes acceptance testing results, configuration status, open action items from SRA, the current status of known problems, and identification of all release related documentation.

1.4 Status and Schedule

The submittal of DID 535/PA1 meets the milestone specified in the CDRL of the National Aeronautics and Space Administration (NASA) contract NAS5-60000. Current project plans specify that this deliverable is due 30 days after SRA for release 6A of the ECS SDPS.

1.5 Organization

Section 1 provides the identification, scope, purpose, status and schedule, and document organization.

Section 2 provides a list of documents that were used directly or indirectly in the preparation of this document.

Section 3 defines the SDPS Release 6A Acceptance Data Package. It includes identification of system Acceptance Test data, configuration audit results, identification and status of action items at SRA, identification of operating manuals, identification of operating procedures, and identification of training materials.

The section Abbreviations and Acronyms contains an alphabetized list of the definitions for abbreviations and acronyms used in this volume.

2. Referenced Documentation

2.1 Parent Documents

The parent documents are the documents from which this SDPS Release 6A Acceptance Data Package's scope and content are derived.

420-05-03	Goddard Space Flight Center, EOS Performance Assurance Requirements for the EOSDIS Core System (ECS)
423-41-01	Goddard Space Flight Center, ECS Statement of Work
423-41-03	Goddard Space Flight Center, EOSDIS Core System Contract Data Requirements Document

2.2 Applicable Documents

The following documents are referenced herein in their entirety, and form a part of this document as being delivered specifically for Release6A of the ECS Project.

305-CD-600	Release 6A Segment/Design Specification for the ECS Project
311-CD-600	Release 6A.03 Data Management Subsystem Database Design and Database Schema Specifications for the ECS Project
311-CD-601	Release 6A.03 INGEST Database Design and Database Schema Specifications for the ECS Project
311-CD-602	Release 6A.03 Interoperability Subsystem (IOS) Database Design and Database Schema Specifications for the ECS Project
311-CD-603	Release 6A.03 Planning and Data Processing Subsystem Database Design and Database Schema Specifications for the ECS Project
311-CD-604	Release 6A.03 Science Data Server Database Design and Database Schema Specifications for the ECS Project
311-CD-605	Release 6A.03 Storage Management and Data Distribution Subsystem Database Design and Database Schema Specifications for the ECS Project
311-CD-606	Release 6A.03 Subscription Server Database Design and Database Schema Specifications for the ECS Project
311-CD-607	Release 6A.03 Systems Management Subsystem Database Design and Database Schema Specifications for the ECS Project

311-CD-608	Release 6A.03 Registry Database Design and Database Schema Specifications for the ECS Project
311-CD-609	Release 6A.05 Nameserver Database Design and Schema Specifications for the ECS Project
313-CD-600	Release 6A ECS Internal Interface Control Document for the ECS Project
412-CD-600	ECS Science Acceptance Test Report for Release 6A
506-CD-600	Configuration Audits of the Science Data Processing Segment, Release 6A for the ECS Project
609-CD-600	Release 6A Operations Tools Manual
625-CD-601	Release 6A, ECS Project Training Material Volume 1: Course Outline
625-CD-603	Release 6A, ECS Project Training Material Volume 3: Problem Management
625-CD-604	Release 6A, ECS Project Training Material Volume 4: System Administration
625-CD-606	Release 6A, ECS Project Training Material Volume 6: Production Planning and Processing
625-CD-607	Release 6A, ECS Project Training Material Volume 7: Resource Planning
625-CD-608	Release 6A, ECS Project Training Material Volume 8: Ingest
625-CD-609	Release 6A, ECS Project Training Material Volume 9: Data Distribution
625-CD-610	Release 6A, ECS Project Training Material Volume 10: Archive Processing
625-CD-611	Release 6A, ECS Project Training Material Volume 11: Database Administration
625-CD-612	Release 6A, ECS Project Training Material Volume 12: Configuration Management
625-CD-613	Release 6A, ECS Project Training Material Volume 13: User Services
625-CD-616	Release 6A, ECS Project Training Material Volume 16: Science Software Integration and Test
625-CD-617	Release 6A ECS Project Training Material Volume 17: System Troubleshooting

625-CD-618	Release 6A ECS Project Training Material Volume 18: Advanced Production Planning and Processing
625-CD-620	Release 6A ECS Project Training Material Volume 2A: Introduction and Detailed System Overview: Science Data Processing Internal Training
740-PP-600	Release 6A Site Readiness Assessment (SRA)
814-RD-602	Version 2 Drop 6A.04 Release for the ECS Project

2.3 Information Documents

The following documents are referenced herein in their entirety. The current version of these documents are applicable to Release 6A of the ECS Project, but may not be related solely to Release 6A.

611-CD-600	Mission Operations Procedures – Release 6A
211-TP-006	Transition Plan 5B to 6A
211-TP-007	Transition Plan 6A.04 to 6A.XX (6A.05) for the ECS Project

3. Acceptance Data

3.1 Configuration Audit Reports

The results of ECS FCA/PCA activities are documented in the Configuration Audits of the Science Data Processing Segment, Release 6A for the ECS Project, 506-CD-600. This report contains the results of FCAs for system acceptance tests, and the results of PCAs for ECS COTS software, Operating System patches, ECS custom code and configuration parameters.

3.2 System Acceptance Test Data

The results of all ECS SDPS acceptance testing is documented in the ECS Science Acceptance Test Report for Release 6A, 412-CD-600. This report contains listings of all tests conducted, analysis of test results, status of test findings. It identifies the existence and location of all test records.

3.3 Release Version Identification

A complete description of the released version of the Release 6A software is documented in Version 2 Drop 6A.04 Release for the ECS Project, 814-RD-602.

Detailed technical information documenting the current Release 6A baseline is maintained by ECSCM, and can be accessed through the Internet at URL http://cmdm.east.hitc.com/baseline/index.html under "Technical Documents". These documents include information on: current operating system versions and patch levels; software port mappings; COTS patch levels; disk partitioning; COTS and ECS Custom Software Release Notes; common start-up and shutdown procedures; complete listings of site-specific hardware and software documents, diagrams, and drawings; vendor information; and network infrastructure information.

3.4 Release 6A Design Data

The overall detailed design for Release 6A of the ECS Project is documented in the Release 6A Segment/Design Specification for the ECS Project, 305-CD-600.

Subsystem specific database design data is contained in the 311-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Subsystem to subsystem interface design is contained in the Release 6A Internal Interface Control Document for the ECS Project, 313-CD-600.

3.5 Open Action Items

The results of SRA may be found in the 740-PP-series documents referenced in their entirety in Section 2.2 of this document. Any action items remaining after SRA are tracked to closure by ECS Project Management.

The current status of all known non-conformances are maintained by the ECS Project in the Distributed Defect Tracking System (DDTS), and are reported weekly to ESDIS.

3.6 Operating Manuals

The human-machine interface characteristics of the tools used by the ECS operations staff are documented in the Release 6A Operations Tools Manual, 609-CD 600.

Release 6A-updated procedures for operators, engineers, operations support, administration and management staff to configure, maintain and operate the ECS system are contained in the Mission Operations Procedures – Release 6A, 611-CD-600. This document contains DAAC standard procedures which may be modified at the DAACs during subsequent training.

3.7 Training Materials

Training materials for Release 6A of the ECS Project are contained in the 625-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Abbreviations and Acronyms

CCB Configuration Control Board

CCR Configuration Change Request

CDRL Contract Data Requirements List

COTS Commercial Off the Shelf

DCN Document Change Notice

DDTS Distributed Defect Tracking System

DID Data Item Description

DM Data Management

ECS EOSDIS Core System

ECSCM ECS Project Configuration Management

EOSDIS EOS Data and Information System

ESDIS Earth Science Data and Information System (GSFC Code 423)

FCA Functional Configuration Audit

GSFC Goddard Space Flight Center

NCR Non-Conformance Report

PCA Physical Configuration Audit

QA Quality Assurance

SRA Site Readiness Assessment

TRR Test Readiness Review

URL Universal Reference Locator

VDD Version Description Document